

DEVAL L. PATRICK GOVERNOR TIMOTHY P. MURRAY LIEUTENANT GOVERNOR JUDYANN BIGBY, MD SECRETARY JOHN AUERBACH

COMMISSIONER

The Commonwealth of Massachusetts Executive Office of Health and Human Services

Department of Public Health William A. Hinton State Laboratory Institute 305 South Street, Jamaica Plain, MA 02130

01/03/2011

Elle Rackemann Assistant District Attorney, Suffolk County

Dear ADA Rackemann,

Enclosed is the information you requested in regards to Commonwealth vs. are copies of the following:

Included

- 1. Drug Analysis Laboratory Receipt.
- 2. Curriculum Vitae for Annie Dookhan & Peter Piro.
- 3. Control Cards with analytical results for samples #

4. Analysis sheets with chemist's hand notations and test results.

5. GC/Mass Spectral analytical data for samples #

I, Annie Dookhan, was the custodial chemist and performed the preliminary testing and net weight for this sample. Peter Piro was the confirmatory chemist and analyzed the GC/MS data for this sample.

If you have any questions about these materials, please call me at the number below.

Sincerely

Annie Khan (Dookhan)

Chemist II

Drug Analysis Lab

Jamaica Plain, MA. 02130

(617) 983-6631

Annie.Khan@state.ma.us

DRUG RECEIPT District/Unit DCO D4 Name & Rank of Arresting Officer 1.0 PAU	PAGE #	1D# [144]	
DEFENDANT'S NAME	ADDRESS	CITY	STATE
		DORCHESTER	MA
DESCRIPTION OF ITEMS SUBMITTED	GROSS QUANTITY	LAB USE GROSS WEIGHT	ONLY ANALYSIS NUMBER
RACK COCATNE	3 0 3 5	4.748	
RACK COCATIVE	2 953	7. 40 gr	
o be completed by ECU personnel only lame and Rank of Submitting Officer	b. Y Whik	ID# //\documents	64

8. 马克克-31

ECU Control #

Curriculum Vitae

Annie Khan (Dookhan)

Education:

University of Massachusetts, Boston, Ma, Master of Science in Chemistry. University of Massachusetts, Boston, Ma, Bachelor of Science in Biochemistry.

Experience:

2003 - present

Chemist I, II, Massachusetts Department of Public Health, Drug Analysis Laboratory

- *Completed six-week training course conducted by senior staff within the Department of Public Health, Drug Analysis Laboratory.
- *Appointed Assistant Analyst by Assistant Commissioner of Public Health, January 2004.
- *Responsible for the identification of drugs to determine violations of harmful and narcotic drug laws.
- *Trained in the use of complex analytical instrumentation, microscopes and balances for the purpose of drug analysis.
- *Maintenance and repairs of all analytical instruments.
- *Responsible for the Quality Control of all analytical instruments, reagents and controls/standards.
- * Responsible for the Quality Control/Quality Assurance program for the drug lab.
- *Notary Public.
- *Oualified as an expert witness in Massachusetts Courts and U.S. District Court

2001 - 2003

OC Analyst I, II, UMMS-Massachusetts Biologic Laboratory, QC Material Control

- *Completed proficiency training conducted by a member of the staff within the MLB Quality Control and Quality Assurance Department.
- *Method Development for creating new techniques and enhancing vaccines for the QC Dept. and FDA.
- *Writing, revising and reviewing Standard Operating Procedures (SOPs).
- *Routine QC testing of products for the FDA.
- *Trained in the use of complex analytical instrumentation, and balances for the purpose of QC analysis for product and validation projects.
- *Calibration, preventive maintenance, QC and QA of analytical instrumentation.
- *Complete testing of chemicals for Vendor Validation Project for the FDA.
- *Compendial testing and interpretation of the USP, ACS, FCC, AOAC, Merck Index, PDR, etc.

Additional Training:

Dept. of Justice - Forensics Professionals.

GLP/GMP course with Massachusetts Biologic Laboratory.

OC/OA training according to FDA Codes and Regulations.

GC and GC/MS courses with Agilent Technologies and Restek.

HPLC course with Waters Cooperation.

FTIR course with Spectros.

TOC training with MBL and Sievers.

Association:

American Chemical Society (ACS)

Northeastern Association of Forensics Science (NEAFS)

Curriculum Vitae

Peter Piro

EDUCATION

Boston Unversity
B.A. in Chemistry and Minor in Biology, 1989
HONORS

Magna Cum Laude, 3.6 GPA Graduated with Distinction in Chemistry Valedictorian of the Chemistry Department

EXPERIENCE

Department of Public Health/State Laboratory Institute

Laboratory Supervisor I/Chemist III, II, I/ Assistant Analyst

December 1991-Present Supervise the operation and maintenance of the Gas Chromatography/Mass Spectrometry Laboratory. Train staff and coordinate schedules. Analyze controlled substances for State and Federal law enforcement agencies. Develop, oversee, and make improvements to the GC/MS laboratory's quality assurance/quality control (QA/QC) program. Serve as the Technical Supervisor of the Drug Analysis Laboratory. Responsible for planning and implementing Quality Improvement (QI) projects. Make recommendations for protocols and procedures by developing methods so work can be performed in an accurate and efficient manner. Qualified as an expert witness in Massachusetts courts and U.S. District Court.

Massachusetts Health Research Institute

Laboratory Technician September 1990-December 1991 Researched the seasonal and special occurrences of DSP and PSP in shellfish samples harvested from coastal waters and Georges Bank using cELISA and bioassays.

TRAINING AND ORGANIZATIONS

- * Completed a six-week training course by senior staff within the Department of Public Health Drug Analysis laboratory.
- * Appointed Assistant Analyst by the Assistant Commissioner of Public Health in February 1991.
- * Elected as a Regular Member to the Northeastern Association of Forensic Chemists on October 27th 1995 and a member of the Massachusetts Organization of State Engineers and Scientists.
- * Completed training in Mass Spectrometry given by the Food and Drug Administration/Forensic Chemistry Center on November 2002.
- * Completed training in Mass Spectrometry Troubleshooting and Maintenance, October 25th 2002, at Agilent Technologies.* Notary Public since 1993.

Date Analyzed: //- 8-/0 No. City: Boston D.C.U. Police Dept. Officer: P.O. SYBIL WHITE Def: Amount: Subst; SUB No. Cont: 3 Cont: pb Date Rec'd: 08/11/2010 No. Analyzed: 1 Net Weight: 0-13 Gross Wt.: 4.74 # Tests: 6.7.3 Findings: Coca we Prelim: (Occure (1)

No. Date Analyzed: 11-8-10
City: Boston D.C.U. Police Dept.
Officer: P.O. SYBIL WHITE
Def:
Amount: Subst: SUB
No. Cont: 2 Cont: pb
Date Rec'd: 08/11/2010 No. Analyzed: 1

Gross Wt.: 4.46

Net Weight: 0- 09

Tests: 6 9 9 0

Prelim: Coccue (i) Findings: GLATINE

DRUG POWDER ANALYSIS FORM

SAMPLE#	_ AGENCY_	POSTON	ANALYST_	AJo
No. of samples tested:			Evidence Wt.	
PHYSICAL DESCRIPTION:		G	ross Wt(3):_	0.7237
OFF White	chesin	BUP8400 6 C	ross Wt(_{\ \}):_	0.2224
	N 36/2	7	Pkg. Wt:	
			Net Wt:	0.1316
	·			
,				
				·
PRELIMINARY TESTS Spot Tests		<u>Micr</u>	rocrystalline Tes	i <u>ts</u>
Cobalt Thiocyanate (—) +	······································	Gol Chlorid	d e <u>+</u>	
Marquis		TLTA	4(++	
Froehde's		<u> </u>	OTHER TESTS	•
Mecke's	The second of th	***************************************		
		<u> </u>		
		Proceding and any or any and any or any and any or any any or any any any or any any any or any any any any any		00000000000000000000000000000000000000
PRELIMINARY TEST RESULT	<u>s</u>	GC/MS C	ONFIRMATORY	TEST
RESULTS COCCUE		RESULTS	cocai	0
DATE 11-01-10		MS OPERATOR	B 25	
		DATE	61-8-10	

DRUG POWDER ANALYSIS FORM

SAMPLE# AGENO	CY BOSTED ANALYST PSO
No. of samples tested:	Evidence Wt.
PHYSICAL DESCRIPTION:	Gross Wt (2): 0.4304
of myite charm	SULSTONCE Gross Wt (1): 0.2164
10 5 6%	Pkg. Wt:
	Net Wt: 0.0965
,	•
	· · · · · · · · · · · · · · · · · · ·
PRELIMINARY TESTS Spot Tests	Microcrystalline Tests
Cobalt	Gold
Thiocyanate (-) +	Chloride
Marquis	TLTA (-)
Froehde's	OTHER TESTS
Mecke's	
PRELIMINARY TEST RESULTS	GC/MS CONFIRMATORY TEST
RESULTS COCCE	RESULTS COCCUIO
DATE 1-0-10	MS OPERATOR P3P
	DATE 11-8-10

File Name : C:\msdchem\1\System7\11_05_10\753205.D

Operator : P. PIRO

Date Acquired : 5 Nov 2010 14:07

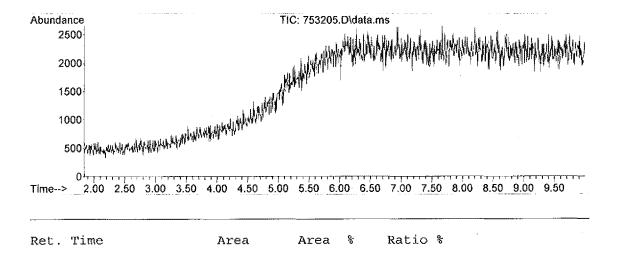
Sample Name : BLANK

Submitted by

Vial Number : 1

AcquisitionMeth: DRUGS.M Integrator : RTE





NO INTEGRATED PEAKS

File Name : C:\msdchem\1\System7\11_05_10\753206.D

Operator : P. PIRO

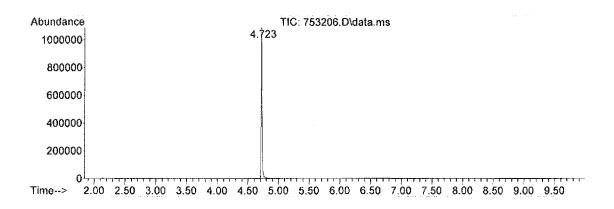
Date Acquired : 5 Nov 2010 14:27 Sample Name : COCAINE STANDARD

Submitted by

Vial Number : 6

AcquisitionMeth: DRUGS.M

Integrator : RTE



Ret. Time	Area	Area %	Ratio %
4.723	1066938	100.00	100.00

File Name : C:\msdchem\1\System7\11_05_10\753206.D

Operator : P. PIRO

Date Acquired 5 Nov 2010 14:27 COCAINE STANDARD Sample Name

Submitted by

Vial Number 6

AcquisitionMeth: DRUGS.M Integrator : RTE

Search Libraries: C:\Database\SLI.L Minimum Quality: 80 Minimum Quality: 80

C:\Database\NIST05a.L

C:\Database\PMW TOX2.L

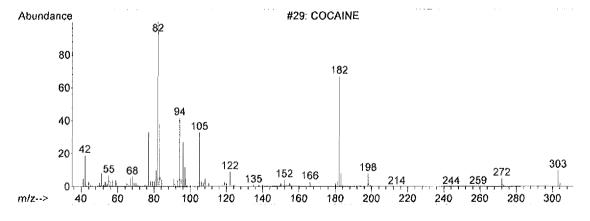
PK# RT Library/ID CAS# Qual

1 4.72 C:\Database\SLI.L

COCAINE

000050-36-2 99

Abundance Average of 4.691 to 4.876 min.: 753206.D\data.ms (-) 80 182 60 40 105 20 303 122 198 152 166 260 272 135 209 222 280 40 80 100 120 180 200 220 240 260 300 60 140 m/z--> 160

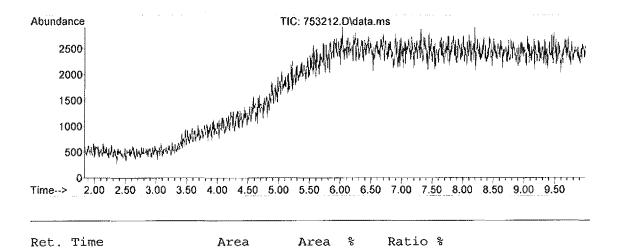


File Name : C:\msdchem\1\System7\11_05_10\753212.D

Operator : P. PIRO

Date Acquired : 5 Nov 2010 15:43

Sample Name : BLANK Submitted by : ASD Vial Number : 1 AcquisitionMeth: DRUGS.M Integrator : RTE



NO INTEGRATED PEAKS

File Name

: C:/madchem/l/System7/ll_05_10/753213.D

: 2 NOV 2010 15:56 Date Acquired : B. PIRO Oberator

Ret. Time

GSA Submitted by Sample Name

: T3 Vial Number

: RTE Integrator AcquisitionMeth: DRUGS.M

09'6 00'6 09'8 00	1.8 03.7 00.7 02.8 00.8	08.8 00.8 08.4 00.4 08.8	7.174.174.174.10 Time> 2.00 2.50 3.00 3
			000000 2.128,45
		768.£	
		or in the contract of the cont	0000001
		1,000,000	0000001
	em.ejeb/O.£†Si	4.723	#500000# #bundance

00.00T	LÐ.98	7347587	£27.4
66.44	25.40	TZ9L88	768.٤
07.51	∌ L. L	T980LT	2,345
T#.81	48.01	363120	2,128

Area %

Area

Ratio %

File Name : C:\msdchem\1\System7\11_05_10\753213.D

Operator : P. PIRO

Date Acquired 5 Nov 2010 15:56

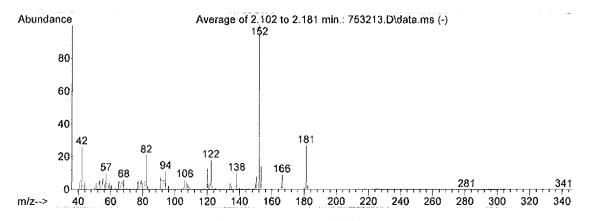
Sample Name

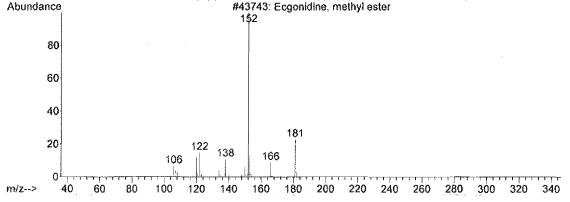
Submitted by ASD Vial Number 13 AcquisitionMeth: DRUGS.M RTEIntegrator

Search Libraries: C:\Database\SLI.L Minimum Quality: 80 Minimum Quality: 80

C:\Database\NIST05a.L

PK#	RT	Library/ID	CAS#	Qual
1	2.13	C:\Database\NIST05a.L Ecgonidine, methyl ester	127379-24-2	98
		2-Carbomethoxy-8-methyl-8-azabicycl	043021-26-7	96
		2(1H)-Pyridinone, 4-hydroxy-6-methy	007135-82-2	3.8





File Name : C:\msdchem\1\System7\11_05_10\753213.D

Operator : P. PIRO

Date Acquired : 5 Nov 2010 15:56

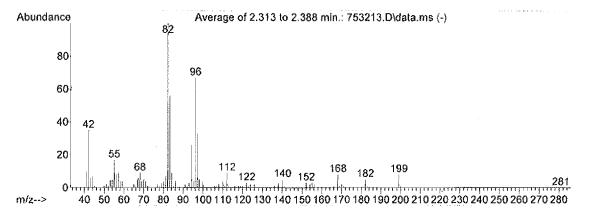
Sample Name :

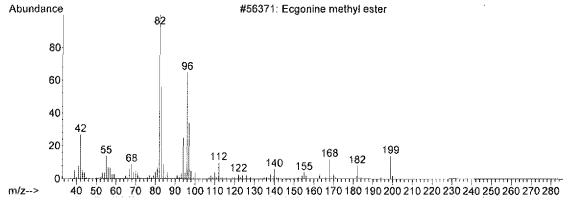
Submitted by : ASD
Vial Number : 13
AcquisitionMeth: DRUGS.M
Integrator : RTE

Search Libraries: C:\Database\SLI.L

C:\Database\SLI.L Minimum Quality: 80 C:\Database\NIST05a.L Minimum Quality: 80

PK#	RT	Library/ID	CAS#	Qual
2	2.35	C:\Database\NIST05a.L Ecqonine methyl ester	106293-60-1	97
		Ecgonine methyl ester	106293-60-1	96
		Ecgonine methyl ester	106293-60-1	96





File Name : C:\msdchem\1\System7\11_05_10\753213.D

Operator : P. PIRO

Date Acquired : 5 Nov 2010 15:56

Sample Name :

Submitted by : ASD
Vial Number : 13
AcquisitionMeth: DRUGS.M
Integrator : RTE

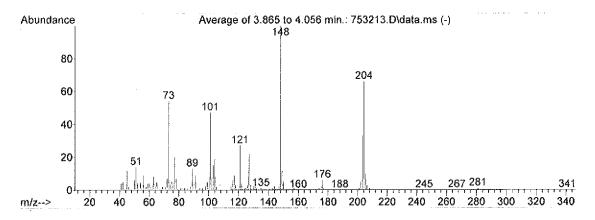
Search Libraries:

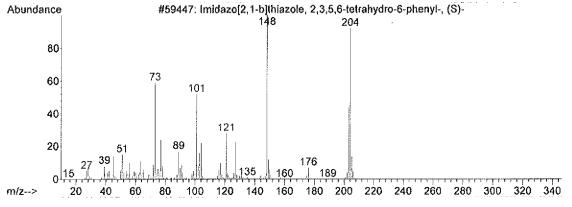
C:\Database\SLI.L

Minimum Quality: 80

C:\Database\NIST05a.L
C:\Database\PMW_TOX2.L

Minimum Quality: 80





File Name : C:\msdchem\1\System7\11 05 10\753213.D

Operator : P. PIRO

Date Acquired : 5 Nov 2010 15:56

Sample Name :

Submitted by : ASD
Vial Number : 13
AcquisitionMeth: DRUGS.M
Integrator : RTE

Search Libraries: C:\Database\SLI.L Minimum Quality: 80

C:\Database\NIST05a.L Minimum Quality: 80

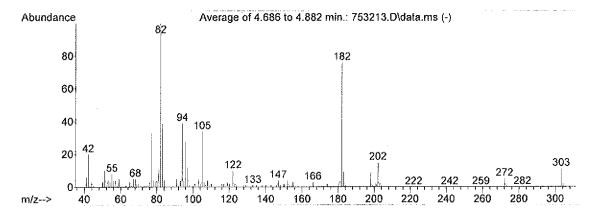
99

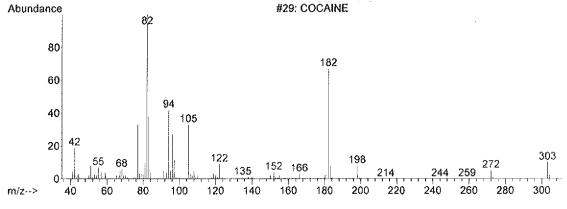
C:\Database\PMW_TOX2.L

PK# RT Library/ID CAS# Qual

4 4.72 C:\Database\SLI.L

COCAINE 000050-36-2



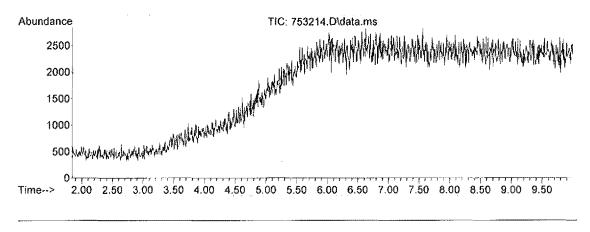


File Name : C:\msdchem\1\System7\11_05_10\753214.D

Operator : P. PIRO

Date Acquired : 5 Nov 2010 16:08

Sample Name : BLANK
Submitted by : ASD
Vial Number : 1
AcquisitionMeth: DRUGS.M
Integrator : RTE



Ret. Time

Area

Area %

Ratio %

NO INTEGRATED PEAKS

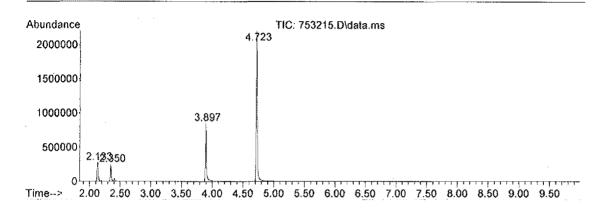
File Name : C:\msdchem\1\System7\11_05_10\753215.D

Operator : P. PIRO

Date Acquired : 5 Nov 2010 16:21

Sample Name :

Submitted by : ASD
Vial Number : 15
AcquisitionMeth: DRUGS.M
Integrator : RTE



Ret. Time	Area	Area %	Ratio %	
2.133	353871	8.15	13.05	
2.350	255855	5.89	9.44	
3.897	1022144	23.53	37.69	
4.723	2711625	62.43	100.00	

File Name : C:\msdchem\1\System7\11 05 10\753215.D

Operator P. PIRO

Date Acquired 5 Nov 2010 16:21

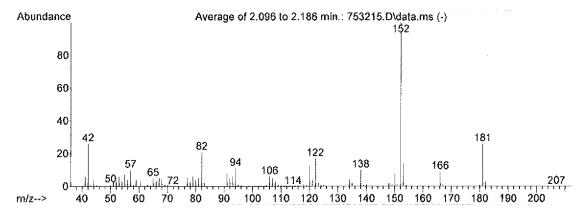
Sample Name

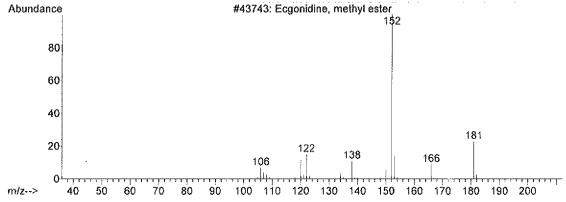
Submitted by : ASD Vial Number 15 AcquisitionMeth: DRUGS.M Integrator : RTE

Search Libraries: C:\Database\SLI.L Minimum Quality: 80 Minimum Quality: 80

C:\Database\NIST05a.L

	PK#	RT	Library/ID	CAS#	Qual
_	1	2.13	C:\Database\NIST05a.L	100200 04 0	
			Ecgonidine, methyl ester 2-Carbomethoxy-8-methyl-8-azabicycl	127379-24-2	98 97
			2,6-Dimethoxytoluene	005673-07-4	38





File Name : C:\msdchem\1\System7\11_05_10\753215.D

Operator P. PIRO

Date Acquired 5 Nov 2010 16:21

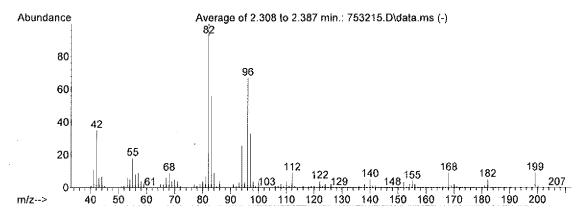
Sample Name Submitted by

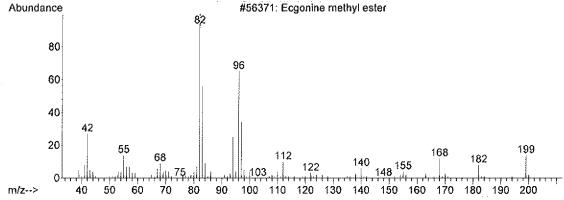
ASD Vial Number 15 AcquisitionMeth: DRUGS.M Integrator : RTE

C:\Database\SLI.L Search Libraries: Minimum Quality: 80 Minimum Quality: 80

C:\Database\NIST05a.L

PK#	RT	Library/ID	CAS#	Qual
2	2.35	C:\Database\NIST05a.L Ecgonine methyl ester Ecgonine methyl ester Pseudoecgonine methyl ester	106293-60-1 106293-60-1 099189-88-5	97 97 95





File Name : C:\msdchem\1\System7\11_05_10\753215.D

Operator : P. PIRO

Date Acquired : 5 Nov 2010 16:21

Sample Name

Submitted by : ASD
Vial Number : 15
AcquisitionMeth: DRUGS.M
Integrator : RTE

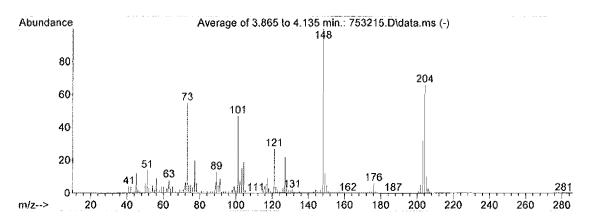
Search Libraries: C:\Database\SLI.L

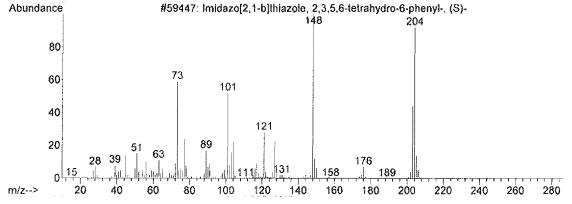
Minimum Quality: 80

C:\Database\NIST05a.L

Minimum Quality: 80

PK#	RT	Library/ID		CAS#	Qual
3	3.90	C:\Database\NIST05a.L			
		<pre>Imidazo[2,1-b]thiazole,</pre>	2,3,5,6-tet	014769-73-4	99
		<pre>Imidazo[2,1-b]thiazole,</pre>	2,3,5,6-tet	006649-23-6	99
		<pre>Imidazo[2,1-b]thiazole,</pre>	2,3,5,6-tet	006649-23-6	99





File Name : C:\msdchem\1\System7\11_05_10\753215.D

P. PIRO Operator

Date Acquired 5 Nov 2010 16:21

Sample Name

Submitted by Vial Number

ASD 15

AcquisitionMeth: DRUGS.M Integrator : RTE

Search Libraries:

Minimum Quality: 80 C:\Database\SLI.L

C:\Database\NIST05a.L Minimum Quality: 80

C:\Database\PMW TOX2.L

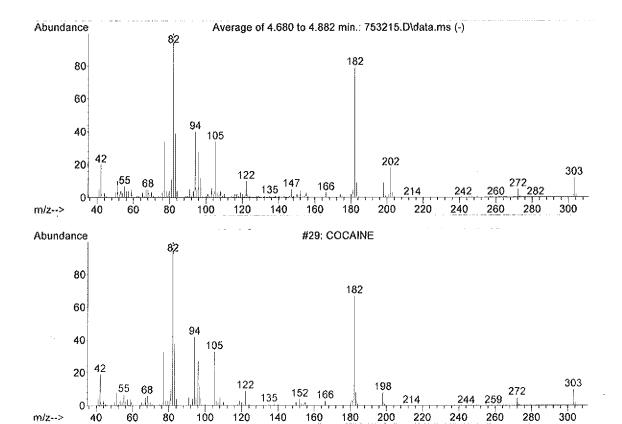
PK# RT Library/ID CAS# Qual

C:\Database\SLI.L 4.72

COCAINE

000050-36-2

99



File Name : C:\msdchem\1\System7\11_05_10\753225.D

Operator : P. PIRO

Date Acquired : 5 Nov 2010 18:28

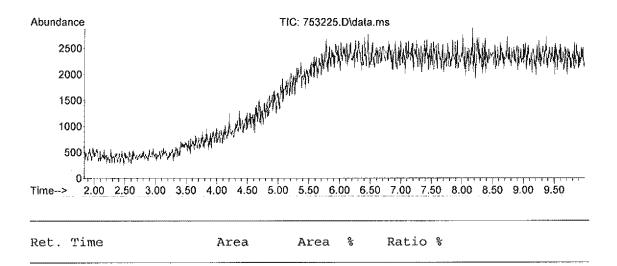
Sample Name : BLANK

Submitted by

Vial Number :

AcquisitionMeth: DRUGS.M

Integrator : RTE



NO INTEGRATED PEAKS

File Name : C:\msdchem\1\System7\11_05_10\753226.D

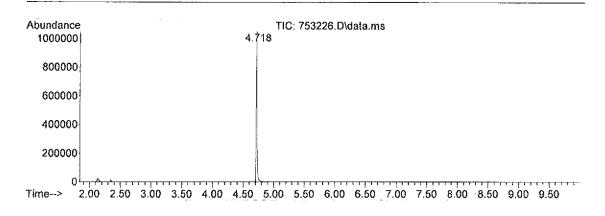
Operator : P. PIRO

Date Acquired : 5 Nov 2010 18:40 Sample Name : COCAINE STANDARD

Submitted by

Vial Number : 6

AcquisitionMeth: DRUGS.M Integrator : RTE



Ret. Time	Area	Area %	Ratio %
4.718	1002675	100.00	100.00

File Name : C:\msdchem\1\System7\11_05_10\753226.D

Operator P. PIRO

Date Acquired 5 Nov 2010 18:40 Sample Name COCAINE STANDARD

Submitted by

Vial Number 6 :

AcquisitionMeth: DRUGS.M Integrator : RTE

Search Libraries: C:\Database\SLI.L

Minimum Quality: 80 C:\Database\NIST05a.L Minimum Quality: 80

C:\Database\PMW TOX2.L

PK# RTLibrary/ID CAS# Qual

4.72 C:\Database\SLI.L 1

COCAINE

000050-36-2

99

